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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,400	07/03/2003	Allan Robert Knoll	1014-SP218	5894
34456	7590	02/11/2005	EXAMINER	
TOLER & LARSON & ABEL L.L.P. 5000 PLAZA ON THE LAKE STE 265 AUSTIN, TX 78746			COOKE, COLLEEN P	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 02/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,400

Applicant(s)

KNOLL ET AL.

Examiner

Colleen P Cooke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 39-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☒ Claim(s) 1-44 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

Applicant's election of Group I, claims 1-38 in the reply filed on 1/20/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). The grounds of the restriction (e.g. that the product can be made by another method) have not been argued at all by the applicant. A mere allegation that the claims are not independent and distinct does not distinctly and specifically point out any errors.

Claim Objections

Claim 20 objected to because of the following informalities: A period is missing from the end of the claim. Appropriate correction is required.

Applicant is advised that should claim 23 be found allowable, claim 27 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "generally constant" in claim 5 is a relative phrase which renders the claim indefinite. The phrase "generally constant" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The phrase makes it unclear at what interval indicia must be to meet the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-8, 10-13, and 18-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norton et al. (6849580) in view of Fasano et al. (6194085).

Regarding claims 1-4 and 20-27, Norton et al. teaches a superconducting tape including a substrate, biaxial buffer layer, YBCO superconducting layer, and overlying Ag layer (Figure 1, Column 6, lines 10-54). Norton et al. teaches that the aspect ratio is typically greater than 10^4 or even greater than 10^5 (Column 6, lines 1-2) of such a tape. Norton et al. further teaches, with specific regards to claims 28-37, that such tape can be used in power cables, power transformers,

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power generators, and power grids as claimed (see Column 3, lines 1-36). Norton et al. does not teach using any sort of indicia on the substrate or tape.

Fasano et al. teaches that identifying indicia may be applied to substrates to be used for verification purposes during substrate processing (Column 1, lines 7-16). Fasano et al. teaches that the indica may include a bar code or serial number (Column 5, lines 36-28) that is printed ink.

It would have been obvious to modify the superconducting tape and substrate by applying indicia as taught by Fasano et al. because Fasano et al. teaches it may be used in the fabrication of an electronic component, which would include a superconductor, and can verify the processing (Column 1, lines 14-16).

Claims 1-8, 10, 12, 14-17, and 20-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norton et al. (6849580) in view of Rumsey et al. (6668449).

Regarding claims 1-4 and 20-27, Norton et al. teaches a superconducting tape including a substrate, biaxial buffer layer, YBCO superconducting layer, and overlying Ag layer (Figure 1, Column 6, lines 10-54). Norton et al. teaches that the aspect ratio is typically greater than 10^4 or even greater than 10^5 (Column 6, lines 1-2) of such a tape. Norton et al. further teaches, with specific regards to claims 28-37, that such tape can be used in power cables, power transformers, power generators, and power grids as claimed (see Column 3, lines 1-36). Norton et al. does not teach using any sort of indicia on the substrate or tape.

Rumsey et al. teaches a series of alignment fiducials which may be made using a laser and which are evenly spaced along the surface (see Figure 4 and Column 8, lines 23-32 and 65-

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67). Rumsey et al. further teaches the fiducial may have any number of shapes including two perpendicular lines and may be used for positioning (Column 9, lines 1-5 and 63-67).

It would have been obvious to modify the superconducting tape and substrate by applying indicia as taught by Rumsey et al. because Rumsey et al. teaches the indicia are useful for circuits and other electric devices, and further that the marks may also be used for cutting a continuous substrate into smaller parts (Column 9, lines 46-62) which would include the superconducting tape having an aspect ratio of 10^5 .

Claims 1-7, 9, 15, 16, and 20-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norton et al. (6849580) in view of Dautartas (6408120).

Regarding claims 1-4 and 20-27, Norton et al. teaches a superconducting tape including a substrate, biaxial buffer layer, YBCO superconducting layer, and overlying Ag layer (Figure 1, Column 6, lines 10-54). Norton et al. teaches that the aspect ratio is typically greater than 10^4 or even greater than 10^5 (Column 6, lines 1-2) of such a tape. Norton et al. further teaches, with specific regards to claims 28-37, that such tape can be used in power cables, power transformers, power generators, and power grids as claimed (see Column 3, lines 1-36). Norton et al. does not teach using any sort of indicia on the substrate or tape.

Dautartas teaches substrates having alignment fiducials, where the fiducials are detents which can be used in positioning during manufacturing (Column 3, lines 14-21).

It would have been obvious to modify the superconducting tape and substrate by applying indicia as taught by applying alignment fiducials such as the detents taught by Dautartas because

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the fiducials allow for alignment of substrate and other articles during manufacturing and assembly of electronic devices.

Claims 1-4, 7-8, 10-13, and 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (6500568) in view of Fasano et al. (6194085).

Robbins teaches a superconducting tape including a substrate, biaxial buffer layer, YBCO superconducting layer, and overlying Ag layer (Figure 2 and Column 7, lines 52-64). Robbins does not teach using any sort of indicia on the substrate or tape.

Fasano et al. teaches that identifying indicia may be applied to substrates to be used for verification purposes during substrate processing (Column 1, lines 7-16). Fasano et al. teaches that the indicia may include a bar code or serial number (Column 5, lines 36-28) that is printed ink.

It would have been obvious to modify the superconducting tape and substrate by applying indicia as taught by Fasano et al. because Fasano et al. teaches it may be used in the fabrication of an electronic component, which would include a superconductor, and can verify the processing (Column 1, lines 14-16).

Claims 1-8, 10, 12, 14-17, and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (6500568) in view of Rumsey et al. (6668449).

Robbins teaches a superconducting tape including a substrate, biaxial buffer layer, YBCO superconducting layer, and overlying Ag layer (Figure 2 and Column 7, lines 52-64). Robbins does not teach using any sort of indicia on the substrate or tape.

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Rumsey et al. teaches a series of alignment fiducials which may be made using a laser and which are evenly spaced along the surface (see Figure 4 and Column 8, lines 23-32 and 65-67). Rumsey et al. further teaches the fiducial may have any number of shapes including two perpendicular lines and may be used for positioning (Column 9, lines 1-5 and 63-67).

It would have been obvious to modify the superconducting tape and substrate by applying indicia as taught by Rumsey et al. because Rumsey et al. teaches the indicia are useful for circuits and other electric devices, and further that the marks may also be used for cutting a continuous substrate into smaller parts (Column 9, lines 46-62) which would include the superconducting tape having an aspect ratio of 10^5 .

Claims 1-7, 9, 15, 16, and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (6500568) in view of Dautartas (6408120).

Robbins teaches a superconducting tape including a substrate, biaxial buffer layer, YBCO superconducting layer, and overlying Ag layer (Figure 2 and Column 7, lines 52-64). Robbins does not teach using any sort of indicia on the substrate or tape.

Dautartas teaches substrates having alignment fiducials, where the fiducials are detents which can be used in positioning during manufacturing (Column 3, lines 14-21).

It would have been obvious to modify the superconducting tape and substrate by applying indicia as taught by applying alignment fiducials such as the detents taught by Dautartas because the fiducials allow for alignment of substrate and other articles during manufacturing and assembly of electronic devices.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colleen P Cooke whose telephone number is 571-272-1170. She can normally be reached Mon.-Thurs. 8am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, her supervisor, Stan Silverman can be reached at 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Colleen P. Cooke 2/9/05

Colleen P Cooke
Examiner
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